

REMARKS

Initially, applicants would like to thank Examiner DeSanto for granting an interview and for his time spent during the interview.

Claims 45-47 and 49-89 are pending in the application. Claims 56 and 58-86 are withdrawn from consideration as being drawn to a non-elected species. Independent claim 45 is amended consistent with what was discussed at the interview of July 8, 2004.

Claims 45-47, 49-52, 87 and 88 are rejected as anticipated by YAMASHITA JP 55-073352. This rejection is respectfully traversed.

As pointed out at the interview, YAMASHITA teaches a gap as shown in Figure 4 to accommodate thermal expansion and contraction. Since the main body (reservoir) of YAMASHITA is glass, having substantially zero clearance would not allow for thermal expansion and contraction such that the glass would break if there were zero clearance.

In addition, as pointed out at the interview, the base of the pipe 15 (needle) of YAMASHITA is within main body 11 such that YAMASHITA does not disclose or suggest that the casing axially forces the hollow element against the base (of the needle).

Since the reference does not disclose that which is recited and since the above-noted limitations were indicated at

the interview as overcoming YAMASHITA, the anticipation rejection should be withdrawn.

Claims 46, 47, 49-52, 87 and 88 depend from claim 45 and are also believed patentable over YAMASHITA.

Claims 45, 46, 49-51 and 87-89 are rejected as anticipated by THRELFALL 368,627. This rejection is respectfully traversed.

As pointed out at the interview, THRELFALL teaches an inner cylinder A and an outer cylinder d. As disclosed on page 1, lines 27-33 of THRELFALL, the fluid is drawn into the syringe and then forced into the outer cylinder so that the outer cylinder acts as a reservoir. In order to form such reservoir, as seen in Figure 1 of THRELFALL, there is a substantial space between cylinder A and cylinder d. Therefore, THRELFALL does not teach or suggest a peripheral shell surrounding an external surface of the hollow element with substantially zero clearance.

In addition, as pointed out the interview in comparing Figures 1 and 2 of THRELFALL, it can be seen that the needle moves with the syringe (inner cylinder) such that THRELFALL also does not meet the limitation that the hollow element and the needle are held fastened to each other at the base by a casing which houses the reservoir.

Accordingly, claim 45 and the claims that depend therefrom are believed patentable over THRELFALL.

Independent claim 89 provides that an internal surface of the housing directly contacts an external surface of the reservoir along an entirety of the external surface. As pointed out at the interview, the space between cylinders A and d prevent these cylinders from contacting each other. In addition, claim 89 provides that the needle is fixedly engaged between the reservoir and the housing. As set forth above, the needle of THRELFALL moves when the syringe is moved and is not fixedly engaged between the reservoir and the housing.

As this reference does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 45-47, 49-51, 57, 87 and 88 are rejected as anticipated by HIGASHIKAWA 5,704,918. This rejection is respectfully traversed.

As pointed out at the interview, each of the embodiments of HIGASHIKAWA shows a needle 109 connected external of the external casing. Therefore, as pointed out at the interview, HIGASHIKAWA does not teach that the casing axially forces the hollow element (internal casing) against the base (of the needle). Accordingly, as further pointed out, HIGASHIKAWA could not meet the limitation that the piston comes into direct contact with the base as further recited in claim 45. As was also pointed out, HIGASHIKAWA could not meet the limitation that

the hollow element and the needle are held fastened to each other at the base as further recited in claim 45. Accordingly, claim 45 and the claims that depend therefrom are also believed patentable over HIGASHIKAWA.

Claim 89 is rejected as anticipated by PARK 6,475,193. This rejection is respectfully traversed.

As pointed out at the interview, PARK also teaches a needle 4 that is external to the casing (see Figure 2). Therefore, PARK could not meet the limitation that the needle is fixedly engaged between the reservoir and the housing as recited in claim 89.

In addition, as further pointed out at the interview, Figure 3 of PARK shows part of external surface of the reservoir 2b not in contact with an internal surface of the housing such that PARK does not meet the limitation that an internal surface of the housing directly contacts an external surface of the reservoir along an entirety of the external surface as recited in claim 89.

As this reference does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 45-47, 49-55 and 57 are rejected as unpatentable over YAMASHITA in view of HIGASHIKAWA. This rejection is respectfully traversed.

As set forth above, neither YAMASHITA nor HIGASHIKAWA teaches or suggests what is recited in claim 45. Accordingly, the proposed combination of these references would not render obvious claim 45. Therefore, claim 45 and the claims that depend therefrom are believed patentable over the combination of YAMASHITA in view of HIGASHIKAWA.

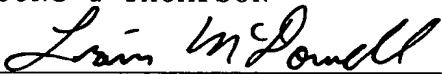
As noted in the Interview Summary, the claim amendments discussed at the interview should place the application in condition for allowance. Since the claims have been amended consistent with what was discussed at the interview, the claims are believed to distinguish over the prior art of record.

Accordingly, in view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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